expansion test in a water jacket, or by other approved methods. No tank shall have been subjected previously to internal pressure within 100 pounds of the test pressure. Each tank shall be tested to the pressure prescribed in §179.301. Pressure shall be maintained for 30 seconds and sufficiently longer to insure complete expansion of tank. Pressure gage shall permit reading to accuracy of one percent. Expansion gage shall permit reading of total expansion to accuracy of one percent. Expansion shall be recorded in cubic cm.

- (1) No leaks shall appear and permanent volumetric expansion shall not exceed 10 percent of total volumetric expansion at test pressure.
 - (2) [Reserved]
- (b) After all fittings have been installed, each tank shall be subjected to interior air pressure test of at least 100 psig under conditions favorable to detection of any leakage. No leaks shall appear.
- (c) Repairs of leaks detected in manufacture or in foregoing tests shall be made by the same process as employed in manufacture of tank. Caulking, soldering, or similar repairing is prohibited.

[29 FR 18995, Dec. 29, 1964. Redesignated at 32 FR 5606, Apr. 5, 1967, and amended by Amdt. 179–10, 36 FR 21355, Nov. 6, 1971; 66 FR 45390, Aug. 28, 2001]

§ 179.300–17 Tests of pressure relief devices.

- (a) Each valve shall be tested by air or gas before being put into service. The valve shall open and be vapor-tight at the pressure prescribed in §179.301.
- (b) Rupture disks of non-reclosing pressure relief devices must be tested and qualified as prescribed in appendix A, Paragraph 5, of the AAR Manual of Standards and Recommended Practices, Section C—Part III, AAR Specifications for Tank Cars (IBR, see §171.7 of this subchapter).
- (c) For pressure relief devices of the fusible plug type, a sample of the plug used shall function at the temperatures prescribed in §179.300-15.
- (d) The start-to-discharge and vaportight pressures shall not be affected by

any auxiliary closure or other combination.

[29 FR 18995, Dec. 29, 1964. Redesignated at 32 FR 5606, Apr. 5, 1967, and amended by Amdt. 179–10, 36 FR 21355, Nov. 6, 1971; 66 FR 45390, Aug. 28, 2001; 68 FR 48572, Aug. 14, 2003; 68 FR 75763, Dec. 31, 2003]

§179.300-18 Stamping.

- (a) To certify that the tank complies with all specification requirements, each tank shall be plainly and permanently stamped in letters and figures 3% inch high into the metal of valve end chime as follows:
 - (1) DOT Specification number.
- (2) Material and cladding material if any (immediately below the specification number).
- (3) Owner's or builder's identifying symbol and serial number (immediately below the material identification). The symbol shall be registered with the Bureau of Explosives, duplications are not authorized.
- (4) Inspector's official mark (immediately below the owner's or builder's symbol).
- (5) Date of original tank test (month and year, such as 1-64 for January 1964). This should be so placed that dates of subsequent tests may easily be added thereto.
 - (6) Water capacity—0000 pounds.
- (b) A copy of the above stamping in letters and figures of the prescribed size stamped on a brass plate secured to one of the tank heads is authorized.

$\S 179.300-19$ Inspection.

- (a) Tank shall be inspected within the United States and Canada by a competent and impartial inspector as approved by the Associate Administrator of Safety, FRA. For tanks made outside the United States or Canada, the specified inspection shall be made within the United States.
- (b) The inspector shall carefully inspect all plates from which tanks are to be made and secure records certifying that plates comply with the specification. Plates which do not comply with § 179.300-7 shall be rejected.
- (c) The inspector shall make such inspection as may be necessary to see that all the requirements of this specification, including markings, are fully